



APPENDIX - PENDING CLAIMS

1. A system for polishing one or more layers of a multi-layer substrate that includes a first metal layer and a second layer comprising (i) a liquid carrier, (ii) at least one oxidizing agent, (iii) at least one polishing additive that increases the rate at which the system polishes at least one layer of the substrate, wherein the polishing additive is selected from the group consisting of pyrophosphates, condensed phosphates, diphosphonic acids, tri-phosphonic acids, poly-phosphonic acids, phosphonoacetic acids, and salts thereof, aminoethylethanolamine, polyethyleneimine, ^{alcohol amines} amino alcohols, amides, imines, imino acids, nitriles, nitros, thioesters, thioethers, carbothiolic acids, carbothionic acids, thiocarboxylic acids, thiosalicylic acids, and mixtures thereof, (iv) at least one passivation film forming agent, and (v) a polishing pad and/or an abrasive.

2. The system of claim 1, wherein the liquid carrier is a nonaqueous solvent.

3. The system of claim 1, wherein the liquid carrier is water. ✓

4. The system of claim 3, wherein the system comprises an abrasive suspended ✓
in the liquid carrier.

5. The system of claim 3, wherein the abrasive is fixed on the polishing pad. ✓

6. The system of claim 3, wherein no abrasive is present in the system, and the polishing pad is a non-abrasive pad.

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8. The system of claim 3, wherein at least one oxidizing agent is a peroxide, and ✓
at least one passivation film forming agent comprises one or more 5-6 member heterocyclic nitrogen-containing rings.

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9. The system of claim 3, wherein at least one polishing additive is selected from
the group consisting of ethylene di-phosphonic acid, 1-hydroxyethylidene-1,1-di-phosphonic
acid, and a mixture thereof. lack

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16. The system of claim 9, wherein at least one oxidizing agent is a peroxide, and at least one passivation film forming agent comprises one or more 5-6 member heterocyclic nitrogen-containing rings.

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17. The system of claim 3, wherein at least one polishing additive is both (a) a ✓ compound selected from the group consisting of pyrophosphates, condensed phosphates, phosphonic acids and salts thereof, and (b) a compound selected from the group consisting of amines, amino alcohols, amides, imines, imino acids, nitriles, and nitros.

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18. The system of claim 3, wherein at least one polishing additive is both (a) 14c a compound selected from the group consisting of amines, amino alcohols, amides, imines, imino acids, nitriles, and nitros, and (b) a compound selected from the group consisting of thioesters, and thioethers, carbothiolic acids, carbothionic acids, thiocarboxylic acids, and thiosalicylic acids.

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19. The system of claim 17, wherein at least one polishing additive is selected 14d from the group consisting of 2-aminoethyl phosphonic acid, amino(trimethylenephosphonic acid), diethylenetriaminepenta(methylenephosphonic acid), hexamethylenediaminetetra(methylene phosphonic acid), and mixtures thereof.

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20. The system of claim 3, wherein the system further comprises a source of ammonia.

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21. The system of claim 20, wherein the system comprises (i) aminotri-(methylenephosphonic acid) and (ii) ammonia or an ammonium salt.

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22. The system of claim 3, wherein the system further comprises at least one stopping compound.

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23. The system of claim 3, wherein the system further comprises at least one polymeric compound that reduces the polishing rate of at least one layer associated with the substrate.

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24. The system of claim 3, wherein at least one passivation film-forming agent is ✓ selected from the group consisting of 1,2,3-triazole, 1,2,4-triazole, benzotriazole,

benzimidazole, benzothiazole, and hydroxy-, amino-, imino-, carboxy-, mercapto-, nitro-, urea-, thiourea-, or alkyl-substituted derivatives thereof

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~~25~~. The system of claim 3, wherein the abrasive is a metal oxide abrasive.
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~~26~~. The system of claim ¹⁸~~25~~, wherein the abrasive is selected from the group consisting of alumina, ceria, germania, silica, titania, zirconia, and coformed products thereof, and mixtures thereof.
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~~27~~. The system of claim ¹⁹~~26~~, wherein the abrasive is alumina.
- ²¹
~~32~~. The system of claim 1, wherein at least one polishing additive is iminodiacetic acid.
- ²²
~~33~~. The system of claim ²¹~~32~~, wherein the system further comprises at least one stopping compound.
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~~34~~. The system of claim ²¹~~32~~, wherein the system further comprises at least one polymeric compound that reduces the polishing rate of at least one layer associated with the substrate.
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~~35~~. The system of claim ¹⁵~~22~~, wherein the system further comprises ammonia or an ammonium salt.